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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|-------------------------------|------------------|
| 10/650,584 | 08/28/2003 | Diane Buske Ellis | 02-270 | 7428 |
| 62753 7590 03/19/2007 VALERIE CALLOWAY CHIEF INTELLECTUAL PROPERTY COUNSEL POLYMER GROUP, INC. 9335 HARRIS CORNERS PARKWAY SUITE 300 CHARLOTTE, NC 28269 | | | EXAMINER COLE, ELIZABETH M | |
| | | | ART UNIT 1771 | PAPER NUMBER |
| SHORTENED STATUTORY PERIOD OF RESPONSE | | MAIL DATE | DELIVERY MODE | |
| 3 MONTHS | | 03/19/2007 | PAPER | |

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/650,584

Applicant(s)

ELLIS, DIANE BUSKE

Examiner

Elizabeth M. Cole

Art Unit

1771

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 and 5-13 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5-13 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date ____.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- ☐ Notice of Informal Patent Application
- ☐ Other: ____.

Art Unit: 1771

1. Claim 13 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The specification as originally filed does not provide support for the limitation that the nonwoven fabric obtained in steps g is softer than nonwoven fabrics made using only steps a-d and g.

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-3, 6, 11, 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oathout, U.S. Patent No. 5,459,912 in view of Bahten, U.S. Patent NO. 6,182,323. Oathout discloses a clean room wipe made by a process of providing a first layer of polymeric staple fibers, a second layer of natural fibers and hydroentangling to form a composite fabric. The polymeric fibers can be thermoplastic fibers such as polyester, polypropylene or polyamide. See abstract and col. 2, line 50- col. 3, line 29. The natural fibers can be wood pulp or other plant fibers. See col. 4, lines 41-57. Oathout differs from the claimed invention because Oathout does not disclose that the wipe should have a sodium ion content of less than 45 ppm and that it should be rinsed with an acetic acid/water solution. Bahten teaches that materials intended for use as clean room wipes or brushes, (col. 3, lines 10-27), can advantageously be subjected to acid

Art Unit: 1771

washing, rinsing and drying, (col. 9, lines 3-20; col. 10, line 60 – col. 11, line 27; col. 12, lines 14-30), in order to remove impurities. Bahten teaches that materials which are thus treated can have a sodium ion content of less than 10 ppm. See Table 1B.

Therefore, it would have been obvious to one of ordinary skill in the art to have subjected the clean room wipe of Oathout to the acid washing, rinsing and drying steps of Bahten, motivated by the expectation that these additional process steps would remove additional impurities from the clean room wipe of Oathout. With regard to product claims 6 and 11, while Bahten does not specifically teach employing acetic acid, since Bahten does teach performing treatments on clean room materials in order to remove impurities and reach a sodium ion content of less than 10 ppm, it is reasonable to assume that once the treatment of Bahten was performed on the wipe of Oathout that the resulting wipe would have the claimed sodium ion particle count.

4. Claims 5, 6, 7-11, 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oathout in view of Bahten as applied to claims above, and further in view of Palm et al, U.S. Patent No. 5,776,353. Neither Oathout nor Bahten teach employing acetic acid as the acid wash. Palm et al teaches at col. 13, that acetic acid was recognized in the art as equivalent to citric acid, (which is taught by Bahten) for the purpose of washing materials in order to remove residual impurities. See col. 13, lines 53-64. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have employed acetic acid in the process taught by Bahten, motivated by the teaching of Palm et al that acetic acid was an art recognized equivalent for this purpose. With regard to the new claim 12, the washing step of

Art Unit: 1771

Bahten is a single step and the rinsing step of Bahten is a single step. The claims do not preclude additional washing or rinsing steps. Therefore, the combination renders claim 12 obvious.

5. Applicant's arguments filed 12/28/06 have been fully considered but they are not persuasive. Applicant argues that there is no motivation to combine the teachings of Oathout and Bahten and that the office action does not explain the motivation.

However, both Oathout and Bahten are concerned with forming clean room wipes. See col. 3, lines 24-25 of Bahten and the entirety of the Oathout document. Therefore, both Bahten and Oathout are in the same field of endeavor. Therefore, the person of ordinary skill in the art would have been motivated to include the acid washing and drying steps set forth in Bahten as improving the quality of clean room wipes by removing impurities to the wipe of Oathout, with the expectation that the additional acid washing and drying steps would improve the quality of the Oathout wipe by further removing impurities.

6. Applicant argues that Bahten teaches away from the claimed process because it uses multiple steps in the washing process. However, the instant claims employ open language and therefore do not preclude additional steps.

7. Applicant argues that Bahten does not teach acetic acid. However, the broadest claims, to which Bahten is applied alone with Oathout, do not specify the particular acid employed.

8. With regard to Palm, Applicant argues that Palm does not teach acid washing of wood pulp fibers as required by Oathout. However, initially, it is noted that Oathout

Art Unit: 1771

discloses a composite material which comprises both polymeric fibers and cellulosic fibers. Further, as set forth above, Bahten already clearly teaches the advantages which arise from performing acid washing and drying treatments on clean room wipe substrates. Bahten differs from the claimed invention because Bahten does not teach employing acetic acid. However, Palm clearly sets forth at col. 13, that acetic acid was recognized in the art as equivalent to citric acid, (which is taught by Bahten) for the purpose of washing materials in order to remove residual impurities. See col. 13, lines 53-64. Therefore, the person of ordinary skill in the art would have recognized that acetic acid was an art recognized equivalent for the purpose of performing acid washes to remove residual impurities and would have been motivated to employ acetic acid in the invention of Bahten.

9. In response to applicant's argument that Palm is nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, Palm is concerned with performing acid washes to remove residual impurities from materials and therefore is reasonably pertinent to the problem with which applicant was concerned.

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

Art Unit: 1771

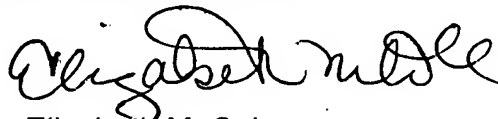
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elizabeth M. Cole whose telephone number is (571) 272-1475. The examiner may be reached between 6:30 AM and 6:00 PM Monday through Wednesday, and 6:30 AM and 2 PM on Thursday.

Mr. Terrel Morris, the examiner's supervisor, may be reached at (571) 272-1478.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

The fax number for all official faxes is (571) 273-8300.



Elizabeth M. Cole
Primary Examiner
Art Unit 1771